



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/564,690

02/23/2007

Jochen Beck

19345

2065

272 7590 08/26/2009
SCULLY, SCOTT, MURPHY & PRESSER, P.C.
400 GARDEN CITY PLAZA
SUITE 300
GARDEN CITY, NY 11530

EXAMINER

LOPEZ, FRANK D

ART UNIT

PAPER NUMBER

3745

MAIL DATE

DELIVERY MODE

08/26/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/564,690	Applicant(s) BECK ET AL.	
	Examiner F. DANIEL LOPEZ	Art Unit 3745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 03 June 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1,2 and 4-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1,2 and 4-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 1/11/06 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

Applicant's arguments filed June 3, 2009, have been fully considered but they are not deemed to be persuasive.

Applicant appears to argue that the basic concept of interconnecting lifting or tilting cylinders is well known as shown by Roth et al (US counterpart to EP 564939); and continues by saying the part cited by the examiner (paragraphs bridging pages 16-17 and 24-25) clearly show detailed aspects and functions of the hydraulic system.

The Applicant appears to misunderstand the problems with this application. The specification and claims state that "lifting cylinders fix a **lifting height or vertical direction of movement** of the working tool relative to a vehicle body" (e.g. claim 1 line 5-6, emphasis added). This working tool is disclosed as a boom and a shovel device (page 1 line 11-18 of specification). A look at the drawings and specification (including claims) indicate that when one of the piston rods is extended, the other rod is retracted. In fig 1, this would not cause a vertical movement of the device (6) toward or away from the vehicle body (4). Rather it would possibly cause the device to be rotated somehow, around a point between the connections of the cylinder devices with the device. This does not appear to produce a change in a vertical or height direction.

The prior art is shown by e.g. Lech et al, which shows boom cylinders (54) connected to the boom (26) between the shovel and the boom pivot point, such that to move the boom **vertically**, the pistons rods are both extended together or retracted together. Lech et al also shows tilting cylinders (50), connected to a shovel, on a same side of the pivot point, such that the piston rods are either extended together to retracted together. Nothing in this prior art shows how the cylinders could be connected to the boom or shovel such that one of the rods is extended while the other rod is retracted, to move the device in a vertical direction.

Lech et al also shows a pair of cylinders where one of the piston rods is extended while the other rod is retracted (46), but this causes a **horizontal** movement of a base (34) of another boom (36). One of ordinary skill would not understand how to use this information to drive an element in a vertical direction, for a variety of reasons, including

Art Unit: 3745

that the horizontal movement doesn't deal with a large force due to changes in height against gravity, whereas vertical movements must deal with this type of force.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Drawings

The drawings are objected to under 37 CFR 1.83(a) because they fail to show how retracting the piston rod of piston 62 and extending the piston rod of piston 65 will rotate (i.e. move the shovel or boom **vertically**) the shovel or boom, since it is unclear how the piston rods and cylinders are connected to the shovel or the boom (they can't be connected to the shovel and boom conventionally, since conventionally both rods extend or retract together) as described in the specification (e.g. paragraph bridging pages 16-17 or 24 and 25, respectively). Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: it is unclear how the piston rods and cylinders are connected to the shovel or boom, (see objection to the drawings).

Claim Rejections - 35 USC § 112

Claims 1-40 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. It is unclear how the piston rods and cylinders are connected to the shovel or boom, (see objection to the drawings).

Claims 2, 5, 6, 24 and 40 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 and 5 last 4 lines “and in that ...face” repeats the limitation of claim 1 and 4, respectively, line 16-20, and therefore should be deleted.

Claim 6 does not further limit claim 4, since it repeats some of the limitation of claim 4 line 16-end, and is confusing. “a first hydraulic line” (line 3) and “a second hydraulic line” (line 5) are the same as that in claim 4 line 18 and 21, respectively.

In claim 24 line 3 and 4-5 “the discharge direction of the first pump...fixes a vertical direction of movement of the working tool” appears to be wrong, since claim 4 claims a pump (presumed to be the first pump) that tilts the shovel, and does not fix the movement in a vertical direction. It would seem that the first and second pumps should be interchanged, and the second pump be given proper antecedent bases. This may effect the limitation of claim 25-40 also.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Lopez whose telephone number is 571-272-4821. The examiner can normally be reached on Monday-Thursday from 6:00 AM –4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Look, can be reached on 571-272-4820. The official fax number is 571-273-8300. Any inquiry of a general nature should be directed to the Help Desk, whose telephone number is 1-800-PTO-9199.

/F. Daniel Lopez/

F. Daniel Lopez
Primary Examiner
Art Unit 3745
August 26, 2009